STN	**Polovodičové súčiastky** **Mechanické a klimatické skúšobné metódy** **Časť 23: Životnosť pri vysokej teplote**	**STN** **EN IEC 60749-23** 35 8799

Semiconductor devices - Mechanical and climatic test methods - Part 23: High temperature operating life

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 04/26

Obsahuje: EN IEC 60749-23:2026, IEC 60749-23:2025

Oznámením tejto normy sa od 31.01.2029 ruší
STN EN 60749-23 (35 8799) z októbra 2004

142432

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2026
Slovenská technická norma a technická normalizačná informácia je chránená zákonom č. 60/2018 Z. z. o technickej normalizácii v znení neskorších predpisov.

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60749-23

January 2026

ICS 31.080.01

Supersedes EN 60749-23:2004; EN 60749-23:2004/A1:2011

English Version

Semiconductor devices - Mechanical and climatic test methods - Part 23: High temperature operating life (IEC 60749-23:2025)

Dispositifs à semiconducteurs - Méthodes d'essais mécaniques et climatiques - Partie 23 : Durée de vie en fonctionnement à haute température (IEC 60749-23:2025)

Halbleiterbauelemente - Mechanische und klimatische Prüfverfahren - Teil 23: Lebensdauer bei hoher Temperatur (IEC 60749-23:2025)

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Ref. No. EN IEC 60749-23:2026 E

European foreword

The text of document 47/2962/FDIS, future edition 2 of IEC 60749-23, prepared by TC 47 "Semiconductor devices" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60749-23:2026.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2027-01-31
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In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 60749-34 NOTE Approved as EN 60749-34

IEC 60749-23

Edition 2.0 2025-12

INTERNATIONAL STANDARD

Semiconductor devices - Mechanical and climatic test methods - Part 23: High temperature operating life

IEC 60749-23:2025-12(en)

ICS 31.080.01

ISBN 978-2-8327-0903-0

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

Semiconductor devices - Mechanical and climatic test methods - Part 23: High temperature operating life

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This edition includes the following significant technical changes with respect to the previous edition:

a) absolute stress test definitions and resultant test durations have been updated.

The text of this International Standard is based on the following documents:

Draft	Report on voting
47/2962/FDIS	47/2983/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts in the IEC 60749 series, published under the general title *Semiconductor devices - Mechanical and climatic test methods*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

– reconfirmed,
– withdrawn, or
– revised.

1 Scope

This part of IEC 60749 specifies the test used to determine the effects of bias conditions and temperature on solid state devices over time. It simulates the device operating condition in an accelerated way and is primarily for device qualification and reliability monitoring. A form of high temperature bias life using a short duration, popularly known as "burn-in", can be used to screen for infant-mortality related failures. The detailed use and application of burn-in is outside the scope of this document.

2 Normative references

There are no normative references in this document.

koniec náhľadu – text ďalej pokračuje v platenej verzii STN